

Remarks

Claims 11 to 20 are cancelled and claims 21 to 30 are added. Claims 21 to 30 are pending in this application of which only claims 21 and 30 are in independent form.

Applicants' attorney thanks Examiner Peche for the telephone interview held on April 2, 2010 during which the amendment was discussed and applicants' attorney was advised that the amendment would not be entered and that a request for continued examination (RCE) would be needed. Applicants' attorney especially thanks Examiner Peche for his suggestions for amending the claims in said telephone interview; however, applicants believe that the art of record permits them to have broader claims. Accordingly, claims 21 to 30 are added herein and have been drafted so that they should now provide a better definition of the applicants' invention.

Claims 11 and 18 to 20 were rejected under 35 USC 102(b) as being unpatentable over Kato et al. Claims 21 and 30 are based on claims 11 and 20 and the following will show that claims 21 and 30 patentably distinguish the applicants' invention over this reference.

From Kato et al, it is known to continuously measure the position of the accelerator pedal as noted in paragraph [0047] of this reference. Furthermore, it is known from Kato et al to assign a first pedal pressing force to the normal operating range of the accelerator pedal from "fully closed" to "fully opened" and to assign a second pedal pressing force to the "kickdown"

actuation range of the accelerator pedal. In this way, and based on the change of the pedal pressing force, the driver recognizes that the accelerator pedal has reached its kickdown position [0035]. In the subject matter of Kato et al, a correction of the measured value for the accelerator pedal position with the actually reached degree of actuation of the accelerator pedal takes place [0013].

Such a correction of the sensor for determining the degree of actuation of the operator-controlled element is not the subject matter of applicants' claims 21 and 30. Instead, claims 21 and 30 provide a reliable correlation of the degree of displacement or actuation of the operator-controlled element to the operator-controlled function wanted by the driver independent of the wear and the temperature drift of the sensor for determining the degree of actuation of the operator-controlled element and independently of the bearing play and the deformation especially of plastic parts of the operator-controlled element (especially of the accelerator pedal) so that the operator-controlled function wanted by the driver is reliably recognized and can be realized without the need of a sensor correction as set forth in Kato et al.

For this purpose, and in contrast to Kato et al, it is not the degree of actuation or displacement of the accelerator pedal itself which is determined in order to determine the operator-controlled function wanted by the driver; instead, the spring constant, that is, a quantity (dU/dt), which characterizes the spring constant, is determined and this results with the instantaneous actuation or displacement of the accelerator pedal.

Thus, claim 21 includes the features and limitations of:

"determining a quantity (dU/dt) characterizing that one of said spring constants corresponding to the instantaneous degree of the displacement of said element; and,

supplying said quantity (dU/dt) to a detector for detecting one of the operator-controlled functions of said element in dependence upon said quantity (dU/dt)."

The operator-controlled function wanted by the driver is detected with the aid of the quantity (dU/dt) characterizing the particular spring constant which corresponds to the instantaneous degree of displacement of the operator-controlled element. The quantity (dU/dt) referred to above which characterizes the spring constant can, for example, be selected from the slope of a time-dependent course of the sensor signal value (U) for the degree of actuation or displacement of the operator-controlled element (please see FIGS. 1 and 2 of applicants' drawings). Such an evaluation of the slope of the time-dependent course of the sensor signal value (U) is nowhere suggested in Kato et al. Indeed, in Kato et al, the pedal pressing force is described only with reference to the information of the driver by reaching the kickdown actuation range of the accelerator pedal as described in paragraph [0035] of this reference. This information is, however, not evaluated by the control unit of Kato et al.

In view of the above, applicants submit that claim 21 should now patentably distinguish the applicants' invention over Kato et al and be allowable. Claim 30 parallels claim 21 in an apparatus context and should likewise now be allowable. The

remaining claims 22 to 29 are all dependent directly or indirectly from claim 21 so that they too should now be allowable.

Claims 12 to 17 were rejected under 35 USC 103(a) as being unpatentable over Kato et al in view of Kuretake. Claims 22 to 27 replace claims 12 to 17 and the applicants have shown above that claim 21 patentably distinguishes their invention over Kato et al and will now show that Kuretake does not fill the void left by Kato et al.

Kuretake discloses a control unit for detecting a degree of opening of an accelerator pedal and the degree of opening of a throttle flap. The throttle flap is controlled in dependence upon the accelerator pedal. In this way, an opening speed or closing speed of the throttle flap is determined in accordance with a set value. Kuretake is concerned with the fastest possible response of the throttle flap and to prevent an overshoot thereof. In contrast to the applicants' invention, Kuretake relates neither to the determination of an operator-controlled function in dependence upon the displacement or actuation of the accelerator pedal nor as to an evaluation of the displacement or actuation of the accelerator pedal based on a quantity characterizing the instantaneously acting spring constant.

From the above, it can be seen that Kuretake lies even farther away from applicants' invention as set forth in claims 21 and 30 so that it cannot possibly fill the void left by Kato et al.

It is true that Kuretake discloses a time-dependent

continuous determination of the actuation of an accelerator pedal (column 6, lines 11 to 16). The time-dependent trace of the actuation of the accelerator pedal is, however, not evaluated, let alone, a determination of the slope of the time-dependent course of the degree of actuation of the accelerator pedal.

Accordingly, neither Kato et al nor Kuretake disclose the determination of a quantity, which characterizes the spring constant corresponding to the instantaneous degree of displacement, nor do the applied references relate to the detection of operator-controlled functions of the operator-controlled element in dependence upon the determined quantity which characterizes the spring constant as set forth in applicants' claims 21 and 30.

In view of the above, it can be seen that Kuretake cannot be combined with Kato et al by our person of ordinary skill to arrive at the applicants' invention.

Reconsideration of the application is earnestly solicited.

Respectfully submitted,



Walter Ottesen
Reg. No. 25,544

Walter Ottesen
Patent Attorney
P.O. Box 4026
Gaithersburg, Maryland 20885-4026

Phone: (301) 869-8950

Date: April 16, 2010